

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

*B<sub>2</sub>*  
1. (Currently amended) An isolated nucleic acid molecule comprising a polynucleotide comprising at least 100 contiguous nucleotides of a coding sequence for a polypeptide at least 95% identical to SEQ ID NO:2 an OsEMF1 polynucleotide sequence, which polynucleotide sequence specifically hybridizes to SEQ ID NO:1 under stringent conditions.

2. (Canceled)

*B<sub>3</sub>*  
3. (Currently amended) The isolated nucleic acid molecule of claim 1, wherein the OsEMF1 polynucleotide is SEQ ID NO:1.

*B<sub>3</sub>*  
4. (Currently amended) The isolated nucleic acid molecule of claim 1, further comprising a plant promoter operably linked to the OsEMF1 polynucleotide.

5. (Canceled)

*B<sub>4</sub>*  
6. (Currently amended) The isolated nucleic acid of claim 1, wherein the OsEMF1 polynucleotide is linked to the promoter in an antisense orientation.

*B<sub>4</sub>*  
7. (Currently amended) An isolated nucleic acid molecule comprising a an OsEMF1 polynucleotide sequence, which polynucleotide sequence encodes an OsEMF1 encoding a polypeptide at least 95% identical to as shown in SEQ ID NO:2.

*B<sub>4</sub>*  
8. (Currently amended) A transgenic plant comprising an expression cassette containing a plant promoter operably linked to a heterologous OsEMF1 the polynucleotide of claim 1 or claim 7, wherein the plant promoter is heterologous to the polynucleotide.

9. (Cancelled)

10. (Currently amended) The transgenic plant of claim 8 9, wherein the OsEMF1 polypeptide is as shown in SEQ ID NO:2.

*35*  
11. (Currently amended) The transgenic plant of claim 8, wherein the heterologous OsEMF1 polynucleotide is linked to the promoter in an antisense orientation.

12. (Cancelled)

13. (Cancelled)

*36*  
14. (Currently amended) A method of decreasing flowering time modulating reproductive development in a plant, the method comprising introducing into the plant an expression cassette containing a plant promoter operably linked to a heterologous polynucleotide comprising at least 100 contiguous nucleotides of a coding sequence for a polypeptide at least 95% identical to SEQ ID NO:2 OsEMF1 polynucleotide, wherein the introduced DNA is expressed in the transformed plant to increase or decrease flowering time.

15. (Cancelled)

16. (Currently amended) The method of claim 14 15, wherein the OsEMF1 polypeptide has an amino acid sequence as shown in SEQ ID NO:2.

*37*  
17. (Currently amended) The method of claim 14, wherein the heterologous OsEMF1 polynucleotide is linked to the promoter in an antisense orientation.

18. (Cancelled)

19. (Cancelled)

20. (Original) The method of claim 14, wherein the expression cassette is introduced into the plant through a sexual cross.

---

21. (New) The isolated nucleic acid of claim 1, comprising a polynucleotide of at least 100 contiguous nucleotides of a coding sequence of a polypeptide as displayed in SEQ ID NO:2.

22. (New) The isolated nucleic acid of claim 7, wherein the polypeptide comprises the sequence displayed in SEQ ID NO:2.

*B6*  
23. (New) The method of claim 14, wherein the plant is a rice plant.

24. (New) The method of claim 14, wherein the polynucleotide encodes SEQ ID NO:2.

---